



**Missouri Department of Natural Resources**  
**Air Pollution Control Program**

## **PART 70**

# **PERMIT TO OPERATE**

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

**Operating Permit Number:** OP2010-116B  
**Expiration Date:** November 1, 2015  
**Installation ID:** 143-0004  
**Project Number:** 2013-09-055

**Installation Name and Address**

New Madrid Power Plant  
41 St. Jude Road  
Marston, MO 63866  
New Madrid County

**Parent Company's Name and Address**

Associated Electric Cooperative, Inc.  
P.O. Box 754  
Springfield, MO 65801-0754

**Installation Description:**

New Madrid Power Plant was originally designed and initially constructed prior to 1971, to operate two (2) coal-fired steam generating boilers for the generation of electric power. The main sources of air pollutants from this installation include two (2) coal-fired steam generating boilers, and coal and ash handling systems. Other insignificant activities are located at the facility, but are not limited to, the following sources: fuel oil and gasoline tanks, waste oil storage tank(s), glycol storage tank(s), sulfuric acid tank(s), various parts washers, and fuel powered maintenance equipment.

This administrative amendment is being issued to correct the effective date of the Acid Rain Permit which is included as Attachment F.

**NOV 13 2014**

Effective Date

Director or Designee

Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

New Madrid Power Plant was originally designed and initially constructed prior to 1971, to operate two (2) coal-fired steam generating boilers (Unit 1 and Unit 2) for the generation of electric power. The units utilize Powder River Basin (PRB) coal. Both units currently control particulate matter emissions using an electrostatic precipitator, while selective catalytic reduction (SCR) is utilized year round to control NO<sub>x</sub> emissions.

The main sources of air pollutants from this installation include two (2) coal-fired steam generating boilers and coal and ash handling systems. Other insignificant activities are located at the facility, but are not limited to, the following sources: fuel oil and gasoline tanks, waste oil storage tank(s), glycol storage tank(s), sulfuric acid tank(s), various parts washers, and fuel powered maintenance equipment.

The reported actual emissions for the past five (5) years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year								
Year	Particulate Matter ≤ Ten Microns (PM-10)	Particulate Matter ≤ 2.5 Microns (PM-2.5)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2009	472.43	340.93	14,480.53	3,451.35	234.88	4,977.02	0.90	136.88
2008	551.20	346.33	14,986.52	11,794.89	242.47	1,100.66	0.93	136.93
2007	248.47	56.15	14,292.18	23,486.79	244.73	1,111.71	0.94	136.97
2006	330.69	56.86	14,678.34	28,366.77	246.10	1,118.03	0.94	136.91
2005	387.91	196.75	13,701.85	17,260.81	230.01	1,043.49	0.87	143.21

## EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	EQ Reference #	Description of Emission Unit	Make/Model	Construction Date
EU0010	EP-01	Main Unit Boiler #1	Babcock and Wilcox, Model RB-466	1972 (In Service Date)
EU0020	EP-02	Main Unit Boiler #2	Babcock and Wilcox, Model RB-483	1977 (In Service Date)
EU0030	EP-03	Emergency Diesel Generator	Caterpillar Model 3512	1983
EU0040	EP-04	Rotary Car Dumper System (Coal Unloading)	Heyl & Patterson, Inc.	1993
EU0050	EP-05	Barge Unloader (For Coal Shipments via Barge)	Dravo – Ladder Type	1970
EU0060	EP-05	Conveyor #1	Jervis B. Webb	1970
EU0070	EP-05	Conveyor #2	Jervis B. Webb	1970
EU0080	EP-05	Conveyor #3	Jervis B. Webb	1970
EU0090	EP-05	Conveyor #4	Jervis B. Webb	1970
EU0100	EP-05	Conveyor #A1	Jervis B. Webb.	1970
EU0110	EP-05	Conveyor #A2	Jervis B. Webb	1970
EU0120	EP-05	Conveyor #B1	Jervis B. Webb	1970
EU0130	EP-05	Conveyor #B2	Jervis B. Webb	1970
EU0140	EP-05	Conveyor #C1	Jervis B. Webb	1970
EU0150	EP-05	Conveyor #C2	Jervis B. Webb	1970
EU0160	EP-05	Conveyor #D1	Jervis B. Webb	1970
EU0170	EP-05	Conveyor #D2	Jervis B. Webb	1970
EU0180	EP-05	Conveyor #5	Roberts & Schaefer, Inc.	1980
EU0190	EP-05	Conveyor #A3	Roberts & Schaefer, Inc.	1980
EU0200	EP-05	Conveyor #6(1A)	Roberts & Schaefer, Inc.	1993
EU0210	EP-05	Conveyor #7(1B)	Roberts & Schaefer, Inc.	1993
EU0220	EP-05	Conveyor #8(2A)	Roberts & Schaefer, Inc.	1993

Emission Unit #	EQ Reference #	Description of Emission Unit	Make/Model	Construction Date
EU0230	EP-05	Conveyor #9(3A)	Roberts & Schaefer, Inc.	1993
EU0240	EP-06	Coal Crusher (4)	Pennsylvania Crusher Model S x CGB 225-FG	1993
EU0250	EP-07	Flyash Silo System (2)	United Conveyor Corp.	1993
EU0260	EP-09	Eight (8) 300 HP Diesel Barge River Pumps	Caterpillar	2001
EU0270	EP-13	Two (2) 345 HP Diesel Barge River Pumps	Caterpillar	2006
EU0280	EP-11, 14 and 15	Fly Ash/Bottom Ash Disposal Process		2006
EU0290	IA	Tioga Heater Unit 1		1994
EU0300	IA	Tioga Heater Unit 2		1994

#### EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Emission Unit ID	EQ Reference #	Description of Emission Sources
FE-01	FE-01	Coal Pile, Bituminous and Subbituminous Coal, 32 acres
FE-02	FE-02	Haul Road
FE-03	FE-03	Fly Ash Unloading
IA-01		Two – 25,000 Gallon #2 Fuel Oil Tanks
		One – 340 Gallon Diesel Fuel Oil Tank
IA-02	EP-08	One – 3,000 Gallon Unleaded Gasoline Tank
IA-03		One – 1,750 Gallon Used Oil Tank
		One – 3,000 Gallon Used Oil Tank
IA-04		Four – 17,800 Gallon Glycol Tanks
		One – 1,000 Gallon Glycol Tank
IA-05		One – 360 Gallon Transmission Fluid Tank
IA-06		One – 440 Gallon Mobile Oil Tank
IA-07		Two – 1,035 Gallon Lubricating Oil Storage Tank
		One – 660 Gallon Bulk Oil Tank
IA-08		One – 8,500 Gallon Yard Diesel Tank
IA-09		Two – 55 Gallon Hydrazine Tanks
IA-10		Abatement Activities (associated with repair/replacement of plant equipment)
IA-11		One – 9,500 Gallon Sulfuric Acid Tank

Emission Unit ID	EIQ Reference #	Description of Emission Sources
IA-12		Two – 790 and One – 200 Gallon Tanks Associated with Turbine Hydraulic System (EHC) Two – 4,000, Two – 13,840 and Two – 9,200 Gallon Tanks Associated with the Lube Oil Tank Vents Lube Oil Vapor Extractor Vent Four – 1,450 and Two – 540 Gallon Tanks Associated with Boiler Feed Pump Lube Oil Vapor Vents
IA-13		Miscellaneous Hydraulic Equipment on Unit 1 and Unit 2
IA-14		Four – 500 Gallon Propane Storage Tanks
IA-15		Four – 1,000 Gallon Propane Storage Tanks
IA-17		Oil (Spills and Leaks) – from Transformers, Equipment, Etc.
IA-18		Nine Portable Parts Washers (Two – 36 Gallon, Six – 27 Gallon and One – 15 Gallon)
IA-19		Glycol Heater Vents
IA-20		Seal Oil Vacuum Pump Discharge Vent
IA-21		Three – 1,000 Gallon Soot Blowing Air Compressor Oil Tanks and Vents
IA-22		Acetylene Cylinders Used in Maintenance Activities
IA-23		Portable Gasoline Powered Pumps Used for Sumps and Maintenance Equipment as Needed
IA-24		Portable Diesel Generators Used for Equipment Power at Various Locations for Maintenance or Start-up Activities
IA		Small Portable Pumps for Various Feed Water, Oil Lubricating and Maintenance Systems Two – 2.29 MMBtu/hr (each) LPG-fired Heaters Two – 2.00 MMBtu/hr (each) LPG-fired Heaters

## DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit No. 1292-014, Issued December 16, 1992;
- 2) Construction Permit No. 122002-013, Issued December 16, 2002;
- 3) Construction Permit No. 052006-001, Issued May 1, 2006;
- 4) Construction Permit No. 082006-011, Issued August 29, 2006;
- 5) Construction Permit No. 092006-004, Issued September 18, 2006; and
- 6) Construction Permit No. 122009-001, Issued December 2, 2009;

## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### **Permit Condition PW001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit No. 1292-014

#### **Operational Limitation/Equipment Specifications:**

- 1) All new conveyors will be totally enclosed. Conveyor belt speeds shall be limited in order to reduce dusting problems. [Construction Permit 1294-014, Special Condition 1]
- 2) Baghouse control shall be provided at all coal transfer points and storage vessels. Compliance with this condition may be obtained by ducting emissions from one (1) or more transfer points or storage vessels to one (1) or more baghouses. [Construction Permit 1294-014, Special Condition 2]
- 3) The transfer points, on to and off of the radial stacker, shall be controlled with wet suppression equipment. [Construction Permit 1294-014, Special Condition 3]
- 4) Dustless unloaders shall be used to transfer the ash from the storage silos to enclosed tank trucks. The ash referenced in this condition is that ash collected from the precipitator and the air heater hoppers. [Construction Permit 1294-014, Special Condition 4]

#### **Monitoring:**

- 1) Plant personnel shall periodically ensure that baghouse control is being provided at all coal transfer points and storage vessels as proposed by Special Condition 2 of Construction Permit 1292-014.
- 2) Plant personnel shall periodically ensure that only dustless unloaders can be used to transfer the ash from the storage silos to enclosed tanks trucks as proposed by Special Condition 4 of Construction Permit 1292-014.



### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<b>EU0010 and EU0020 – Unit #1 and Unit #2 Boilers</b>			
Both Units Equipped with High Efficiency Electrostatic Precipitator (CD-01) for PM Control and Selective Catalytic Reduction System (SCR) for NO <sub>x</sub> Control			
Emission Unit	Description	Manufacturer/Model #	2008 EIQ Reference #
EU0010	Main Unit Boiler #1 – 6,340 MMBtu/hr Cyclone Boiler; Bituminous Coal (BC), Subbituminous Coal (SC), and #1 & #2 Fuel Oil Fired. Unit put in service: 1972. Significant commitments to the construction design and units purchased prior to 1970.	Babcock Wilcox, Model RB-466	EP-01
EU0020	Main Unit Boiler #2 – 6,340 MMBtu/hr Cyclone Boiler; Bituminous Coal (BC), Subbituminous (SC), and #1 & #2 Fuel Oil Fired. Unit put in service: 1977. Significant commitments to the construction design and units purchased prior to 1970.	Babcock Wilcox, Model RB-483	EP-02

<b>Permit Condition EU0010-001 and EU0020-001</b>
10 CSR 10-6.060 Construction Permits Required Construction Permit No. 092006-004 [BACT for CO] Construction Permit No. 122009-001 Construction Permit No. 122010-012

*Compliance with the Construction Permit 122009-001 begins at the commencement of continuous operation of the CyClean facility to supply refined coal to EU0010 and EU0020.*

#### **Emission Limitation:**

- 1) Standards of Performance for Best Available Control Technology (BACT) for Carbon Monoxide (CO): [Construction Permit 092006-004, Special Condition 1 and 122010-012 Special Condition 2A]
  - a) New Madrid Power Plant shall not emit more than 0.55 pounds of CO per million British thermal units (lb/MMBtu) of heat input each from Unit 1 and Unit 2 based on a 30-day rolling average. This limit is exclusive of emissions occurring during start-up, shutdown and malfunction. [Construction Permit 092006-004, Special Condition 1.A and 122010-012, Special Condition 2A]
  - b) New Madrid Power Plant shall not emit more than 34,449 tons per year of CO combined from Unit 1 and Unit 2. This limit is inclusive of emissions during start-up, shutdown, and malfunction. [Construction Permit 122010-012, Special Condition 2.B]
  - c) New Madrid Power Plant shall operate continuous CO emission monitors to measure, record and report CO emissions compliance. [Construction Permit 092006-004, Special Condition 1.C and 122010-012, Special Condition 2C]

- d) During periods of CO CEMS monitor downtime, the permittee shall estimate the missing emissions for substitution similar to the CO<sub>2</sub> missing data procedures of 40 CFR 75.

**Operational Limitation/Equipment Specifications:**

Control Device Requirement: [Construction Permit 122009-001, Special Condition 3]

New Madrid Power Plant shall control metal HAP emissions from Boilers #1 & 2 using an electrostatic precipitator (ESP). The ESP shall be maintained in accordance with the manufacturer's specifications.

**Monitoring:**

Continuous Emission Monitoring System (CEMS) – Unit 1 and Unit 2:

[Construction Permit 092006-004, Special Condition 2 and 122010-012, Special Condition 3]

- 1) New Madrid Power Plant shall install, certify, operate, calibrate, test and maintain CEMS for CO and any necessary auxiliary monitoring equipment in accordance with all applicable regulations. If there are conflicting regulatory requirements, the more stringent shall apply. [Construction Permit 092006-004, Special Condition 2.A and 122010-012, Special Condition 3A]
- 2) CEMS certification shall be made pursuant to 40 CFR Part 60, Appendix B, Performance Specification 4. [Construction Permit 092006-004, Special Condition 2.B and 122010-012, Special Condition 3B]
- 3) Periodic quality assurance assessments shall be conducted according to the procedures outlined in 40 CFR Part 60, Appendix F. [Construction Permit 092006-004, Special Condition 2.C and 122010-012, Special Condition 3C]
- 4) New Madrid Power Plant shall install and operate a data acquisition and handling system to calculate emissions in terms of the emission limitations specified in this permit. [Construction Permit 092006-004, Special Condition 2.D and 122010-012, Special Condition 3D]

**Recordkeeping:**

New Madrid Power Plant shall maintain all records required by this permit, on-site, for the most recent 60 months of operation and shall make such records available immediately to any Missouri Department of Natural Resources' personnel upon request. [Construction Permit 092006-004, Special Condition 3 and 122010-012, Special Condition 4]

**Reporting:**

New Madrid Power Plant shall report CO emissions in their current semi-annual monitoring (SAM) report and in the annual compliance certification (ACC). [Construction Permit 092006-004, Special Condition 4 and 122010-012, Special Condition 5]

**Permit Condition EU0010-002 and EU0020-002**

10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning  
Equipment Used for Indirect Heating  
40 CFR Part 64 Compliance Assurance Monitoring (CAM)

**Emission Limitation:**

- 1) The permittee shall not emit particulate matter in excess of 0.18 pounds per million Btu of heat input.
- 2) Emissions in excess of the level of 0.18 pounds per million Btu of heat input during periods of start-up, shutdown, and malfunction may be excused under 10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions, provided the permittee has made this assertion to the Missouri Department of Natural Resources Air Pollution Control Program in accordance with that rule and these agencies agree with that assertion.

**Monitoring:**

- 1) The permittee shall install, certify, operate and maintain a certified Continuous Opacity Monitoring System (COMS) with an automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere in order to provide a reasonable assurance of the performance of the electrostatic precipitators (ESP). Previously installed and certified monitoring systems that conform to provisions of the Performance Specification for COMS meet the monitoring requirements.
- 2) The performance requirements for the COMS and an excursion with its associated averaging time for each emission unit shall be as specified in the following table:

<b>Associated Electric Cooperative, Inc. – New Madrid CAM Monitoring Approach for Boilers #1 and #2</b>	
<b>Particulate Matter (PM) Compliance Indicator</b>	
<b>Indicator</b>	Opacity
<b>Measurement Approach</b>	Continuous Opacity Monitoring System (COMS)
<b>Indicator Range</b>	<p>Based on recent stack test data submitted by the Permittee, the baseline 1-hour average opacity for Unit 1 and 2 is in the range of 6%, and 9%, respectively.</p> <p>The excursion level for both Unit 1 and Unit 2 is defined as a 1-hour average opacity greater than 30%. Excursions trigger an inspection, corrective action, and a reporting requirement.</p> <p>Based on stack test data submitted by the Permittee, there will be credible evidence of a PM exceedance if the 3-hour average opacity for either Unit 1 or Unit 2 exceeds 32%.</p>
<b>Performance Criteria</b>	
<b>Data Representativeness</b>	Each boiler discharges to a dedicated stack with no bypass capabilities. Each stack is equipped with a COMS located downstream of the ESP that complies with the applicable version of 40 CFR Part 60, Appendix B, Performance Specification 1 (PS-1).
<b>Verification of Operational Status</b>	Not applicable since the selected monitoring approach utilizes existing COMS that were initially installed and evaluated per the applicable version of PS-1.
<b>QA/QC Practices and Criteria</b>	Perform a daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in applicable version of PS-1.
<b>Monitoring Frequency</b>	Continuous [i.e., the COMS is to complete a minimum of one cycle (i.e., sampling, analyzing, and data recording) for each successive 10-second period].
<b>Data Collection Procedure</b>	
<b>Averaging Period</b>	The data acquisition system is to reduce the 10-second data points to 6-minute, 1-hour, and 3-hour block averages.
<b>Reporting</b>	Summary information on the number, duration, and cause for any excursions and COMS downtime will be reported on a semi-annual basis.

- 3) *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [§64.7(b)]
- 4) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant specific emissions units are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§64.7(c)]
- 5) *Response to excursions or exceedances:* [§64.7(d)]
  - a) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [§64.7(d)(1)]
  - b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [§64.7(d)(2)]
- 6) *Documentation of need for improved monitoring.* After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [§64.7(e)]

**Quality Improvement Plan (QIP):**

- 1) The Air Pollution Control Program may require the permittee to develop and implement a QIP if either boiler has accumulated excursions exceeding 5 percent duration of the operating time during the reporting period. [§64.8(a)]
- 2) Elements of a QIP: [§64.8(b)]

- a) The owner or operator shall maintain a written QIP, if required, and have it available for inspection. [§64.8(b)(1)]
- b) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate: [§64.8(b)(2)]
  - i) Improved preventive maintenance practices. [§64.8(b)(2)(i)]
  - ii) Process operation changes. [§64.8(b)(2)(ii)]
  - iii) Appropriate improvements to control methods. [§64.8(b)(2)(iii)]
  - iv) Other steps appropriate to correct control performance. [§64.8(b)(2)(iv)]
  - v) More frequent or improved monitoring (only in conjunction with one or more steps under §64.8(b)(2)(i) through (iv)). [§64.8(b)(2)(v)]
- 3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined. [§64.8(c)]
- 4) Following implementation of a QIP, upon any subsequent determination pursuant to §64.7(d)(2) the Administrator or the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have: [§64.8(d)]
  - a) Failed to address the cause of the control device performance problems; or [§64.8(d)(1)]
  - b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [§64.8(d)(2)]
- 5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. [§64.8(e)]

**Recordkeeping:**

- 1) The owner or operator shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii) of 40 CFR Part 70. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [§64.9(b)(1)]
- 2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [§64.9(b)(2)]

**Reporting:**

- 1) The owner or operator shall submit monitoring reports to the permitting authority in accordance with §70.6(a)(3)(iii) of 40 CFR Part 70. [§64.9(a)(1)]
- 2) A report for monitoring under this part shall include, at a minimum, the information required under §70.6(a)(3)(iii) of 40 CFR Part 70 and the following information, as applicable: [§64.9(a)(2)]
  - a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [§64.9(a)(2)(i)]

- b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [§64.9(a)(2)(ii)]
- c) A description of the actions taken to implement a QIP (if a QIP is required) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [§64.9(a)(2)(iii)]
- 3) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 4) The permittee shall report any deviations from the emission limitation, monitoring, quality improvement plan, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

**Permit Condition EU0010-003 and EU0020-003**

10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants

**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any single existing source any visible emissions with an opacity greater than forty percent (40%).
- 2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one six (6) minute period in any sixty (60) minutes air contaminants with an opacity up to sixty percent (60%).

**Monitoring:**

- 1) A continuous opacity monitoring system shall be used to determine the opacity of the stack gases generated by the boilers. Sampling frequency shall be in accordance with 40 CFR Part 60.13(e)(1). Results shall be recorded on a Data Acquisition System (DAHS).
- 2) The permittee shall calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity. The installation shall conduct a daily calibration check on the monitoring system as outlined by 40 CFR Part 60, Appendix B – Performance Specification 1.

**Recordkeeping:**

- 1) Maintain a file (hard copy or electronic version) of all information reported in the quarterly reports:
  - a) Recordkeeping shall consist of the following information as applicable:
    - i) Summary information on the number, duration and cause (including unknown cause, if applicable) of exceedances, as applicable, and the corrective actions taken;
    - ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).
    - iii) If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.
- 2) Maintain a file (hard copy or electronic version) of all six-minute opacity averages and daily Quality Assurance/Quality Control Records
- 3) Attachment D or an equivalent recordkeeping sheet shall be used to record all information required by this rule.

**Reporting:**

- 1) The permittee shall report quarterly when the monitoring system showed exceedances of the opacity limitations set forth in this rule. If any exceedances were recorded, the quarterly report should give the day, the duration of how long the emission unit was out of the limitations set forth in this rule, and a data summary of the exceedance (the data summary shall consist of the magnitude in actual percent opacity of all six (6) minute averages of opacity greater than the opacity emission limitation). Additionally, the report shall give a detailed explanation of why the plant was in exceedance (nature and cause) and corrective action taken by New Madrid Power Plant to bring the emission unit back into the limitations set forth in this rule. Further, the permittee shall report when the monitoring system is down due to inoperative periods, repairs, malfunctions or monitor adjustments. The report shall give a reason why the monitor was down, the duration of the downtime event, and provide the percent total operating period the monitor experienced downtime. The report shall distinguish between those downtime events that were due to Quality Assurance activities and those events that occurred for other reasons. However, if no excess emissions occurred within the quarter and the continuous opacity monitoring system has not been inoperative, repaired, or adjusted, that information shall be included in the report. All quarterly reports shall be postmarked by the thirtieth (30) day following the end of each calendar quarter.
- 2) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

**Permit Condition EU0010-004 and EU0020-004**

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

**Emission Limitation:**

- 1) The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from Unit 1 and Unit 2 in excess of ten (10) pounds of sulfur dioxide per million Btu actual heat input averaged on any consecutive three (3) hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]<sup>1</sup>

**Operation Limitation:**

When burning fuel oil, the units shall be limited to fuel oils with a sulfur content of no more than 0.5 percent by weight sulfur. The fuel oils known to be less than 0.5 percent by weight sulfur per Chapter 414 RSMo, section 414.032, ASTM D396 – Table 1 and ASTM D975 - Table 1, are fuel oil #1 and #2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, the unit is not limited to the known fuel oils listed, above, but limited to fuel oils based solely on having percent sulfur by weight content of 0.5 percent or less.

**Monitoring:**

- 1) The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring sulfur dioxide (SO<sub>2</sub>) emission rate (lb SO<sub>2</sub>/mmBtu) in accordance with 40 CFR Part 75.

<sup>1</sup> 10 CSR 10-6.260(3)(B) is state-only requirement.

- 2) In addition, the permittee shall comply with the quality assurance requirements in 40 CFR Part 75, Appendix B.
- 3) The permittee shall conduct on the frequency required in Part 75, Appendix B, a Relative Accuracy Test Audit on the continuous emission monitoring system, pursuant to 40 CFR Part 75, in 40 CFR Part 60, Appendix A, using Reference Method 6C for SO<sub>2</sub>, or equivalent EPA approved method.

**Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel as fired as required under 10 CSR 10-6.040. Fuel sulfur content per 10 CSR 10-6.040 shall not be required when using CEMS data.
- 2) The permittee shall record the daily monitoring system calibration check done on the CEMS. Attachment E or an equivalent recordkeeping sheet shall be used to record all information required by this rule.
- 3) The installation shall maintain records of the fuel type used verifying a sulfur content less than 0.5 percent by weight when the unit is consuming fuel oil. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5 percent by weight will be acceptable. If this cannot be accomplished then compliance to the emission limitations shall be determined by source testing and shall be accomplished as specified in 10 CSR 10-6.030(6). Other methods approved by the staff Director in advance may be used. Sulfur content of fuel shall be analyzed and recorded. The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2) and the actual heat input should be determined by multiplying the heating value of the fuel by the amount of fuel burned.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of the sulfur limits established by 10 CSR 10-6.260, or any malfunction that causes an exceedance of the sulfur limits.
- 2) The permittee shall report quarterly when the continuous emission monitoring system showed exceedances of the sulfur limitations set forth in this rule. If any exceedances were recorded, the quarterly report should give the day and duration of how long the emission unit was out of the limitations set forth in this rule. Additionally, the report shall give a detailed explanation of why the plant was in exceedance and corrective action taken by New Madrid Power Plant to bring the emission unit back into the limitations set forth in this rule. Further, the permittee shall report when the monitoring system is down due to inoperative periods, repairs, malfunctions or monitor adjustments. The report shall give a reason as to why the monitor was down, the duration of the downtime event, and provide the percent of the total operating period the monitor experienced downtime. The report shall distinguish between those downtime events that were due to Quality Assurance activities and those events that occurred for other reasons. However, if no excess emissions occurred within the quarter and the continuous SO<sub>2</sub> monitoring system has not been inoperative, repaired, or adjusted, that information shall be included in the report. All quarterly reports shall be postmarked by the thirtieth (30) day following the end of each calendar quarter.

**Permit Condition EU0010-005 and EU0020-005**

10 CSR 10-6.270 Acid Rain Source Permits  
40 CFR Part 72, 73, and 75 through 78



**Emission Limitation:**

- 1) The New Madrid Power Plant shall obtain an Acid Rain Source Permit for Units 1 and 2 (EU0010 and EU0020, respectively) pursuant to Title IV of the Clean Air Act.
  - a) This installation submitted an Acid Rain application to the Missouri Department of Natural Resources on May 20, 2010. Attachment F contains a copy of this permit. The permit has been incorporated into this operating permit and is, therefore, effective as long as this Part 70 operating permit is effective. The permittee shall submit a renewal Acid Rain application at the same time as they submit a renewal Part 70 operating permit application.

**Monitoring/Recordkeeping:**

The New Madrid Power Plant shall retain the most current acid rain permit issued to this installation on site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

Annual Compliance Certification

**Permit Condition EU0010-006 and EU0020-006**

10 CSR 10-6.362 Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program  
10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program  
10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>x</sub> Trading Program

**Emission Limitation:**

- 1) The permittee shall obtain a CAIR Permit for Unit 1 (EU0010) and Unit 2 (EU0020) pursuant to Title IV of the Clean Air Act.
  - a) This installation submitted a CAIR application to the Missouri Department of Natural Resources on July 5, 2007. Attachment G contains a copy of this permit. The permit has been incorporated into this operating permit and is, therefore, effective as long as this Part 70 operating permit is effective. The permittee shall submit a renewal CAIR application at the same time as they submit a renewal Part 70 operating permit application.

**Monitoring/Recordkeeping:**

The permittee shall retain the CAIR permit issued to this installation onsite and shall make the CAIR permit available to any Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

Annual Compliance Certification.

**EU0030 – Emergency Diesel Generator**

Emission Unit	Description	Manufacturer/Model #	2008 EIQ Reference #
EU0030	8 MMBtu/hr (1474 hp) Emergency Diesel Generator. Year put in service 1983 Fuel: #2 distillate oil	Caterpillar 3512	EP - 03

**Permit Condition EU0030-001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit No. 122002-013

**Emission Limitation:**

- 1) No person shall cause or allow emissions into the atmosphere from any new source operation gases containing more than five (5) hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) No person shall cause or allow emissions into the atmosphere from any new source operation gases containing more than thirty-five (5) milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any three (3) hour time period.
- 3) No person shall cause of permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]

**Operational Limitation:**

The emission units shall be limited to burning fuel oil with a sulfur content of no more than 0.5 percent sulfur by weight. The fuel oils known to be less than 0.5 percent by weight sulfur per Chapter 414 RSMo, Section 414.032, ASTM D396-Table 1 and ASTM D975-Table 1, are fuel oil #1 and #2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, these units are not limited to the known fuel oils listed above, but are limited to fuel oils based solely on having a percent sulfur by weight content of 0.5 percent or less.

**Monitoring/Recordkeeping:**

The permittee shall maintain records of the fuel type used verifying a sulfur content less than 0.5 percent by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5 percent by weight will be acceptable.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

EU0040 – Rotary Car Dumper System (Coal Unloading)			
Emission Unit	Description	Manufacturer/Model #	2008 EIQ Reference #
EU0040	Rotary Car Dumper System (Coal Unloading) Control Device : Low Temperature Fabric Filter Year Equipment put in Service: 1993.	Heyl & Patterson, Inc	EP - 04

**Permit Condition EU0040-001**

10 CSR 10-6.070 New Source Performance Regulations  
40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants

**Emission Limitation:**

On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [§60.252(c)]

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0050 – Barge Unloader</b> (Coal Unloading System - Alternate Operating Scenario)			
Emission Unit	Description	Manufacturer/Model #	2008 EIQ Reference #
EU0050	Barge Unloader – Alternate coal unloading from barge unloading conveyor system. Year put in service 1970 (alternate to EU0040 – Rotary Car Dumper)	Dravo – Ladder Type	EP-04

**Permit Condition EU0050-001**

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any single existing source any visible emissions with an opacity greater than forty percent (40%).
- 2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one six (6) minute period in any sixty (60) minutes air contaminants with an opacity up to sixty percent (60%).

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0060 through EU0170 – Conveyor System</b> (Coal Conveying - Equipment Put in Service: 1970)			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0060 through EU0090	Conveyors #1, 2, 3 & 4, original conveyors (alternate operating scenario ID #AOS-01 – Alternate coal conveying from barge unloader system)	Jervis B. Webb	EP-05
EU0100 through EU0130	Conveyors #A1, A2, B1 & B2, original conveyors (part of current operation) Control Device : Low Temperature Fabric Filter		
EU0140 through EU0170	Conveyors #C1, C2, D1 & D2 Control Device : Dust Suppression, Wet Spray		

<b>Permit Condition EU0060-001 and EU0170-001</b> 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants
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**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any single existing source any visible emissions with an opacity greater than forty percent (40%).
- 2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one six (6) minute period in any sixty (60) minutes air contaminants with an opacity up to sixty percent (60%).

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-

- b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
- c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0180 through EU0230 – Conveyor System</b> (Coal Conveying)			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0180	Conveyor #5, original conveyors (alternate operating scenario ID #AOS-01) – Barge Unloading Year Equipment put in Service: 1980	Roberts & Schaefer, Inc.	EP-05
EU0190	Conveyor #A3, original conveyors (part of current operation) Year Equipment put in Service: 1980		
EU0200 through EU0230	Conveyors #6(1A), 7(1B), 8(2A) & 9(3A), coal conversion projects current operation Year Equipment put in Service: 1993 Control Device : Low Temperature Fabric Filter		

<b>Permit Condition EU0180-001 through EU0230-001</b> 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants
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**Emission Limitation:**

On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the

atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [§60.252(c)]

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0240 – Coal Crushers (Coal Crushers – Total of 4)			
Emission Unit	Description	Manufacturer/Model #	2008 EIQ Reference #
EU0240	Four (4) Coal Crushers; Year Equipment put in Service: 1993 Control Device : Low Temperature Fabric Filter	Pennsylvania Crushers S x CBG 225-FG	EP-06

Permit Condition EU0240-001
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60 Subpart Y Standards of Performance for Coal Preparation Plants

**Emission Limitation:**

On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [§60.252(c)]

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.



- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0250 – Fly Ash Silo System (Equipment Put in Service: 1993)			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0250	Fly ash unloading (quantity 2) – ash collection system from the precipitator and air heater hoppers and transfer it to a pair of storage silos	United Conveyor Corp.	EP-07

**Permit Condition EU0250-001**

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any single existing source any visible emissions with an opacity greater than twenty percent (20%).
- 2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one six (6) minute period in any sixty (60) minutes air contaminants with an opacity up to sixty percent (60%).

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.

- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

EU0260 and EU2070 – Diesel Barge River Pumps		
Emission Unit	Description	2008 EIQ Reference #
EU0260	Diesel Barge River Pumps - Eight (8) Caterpillar 300 horsepower (HP) diesel fired internal combustion engines. Construction date: 2002	EP-09
EU0270	Diesel Barge River Pumps - Two (2) Caterpillar 345 horsepower (HP) diesel fired internal combustion engines	EP-13

<b>Permit Condition EU0260-001</b> 10 CSR 10-6.060 Construction Permits Required Construction Permit No. 122002-013
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**Emission Limitation:**

Associated Electric Cooperative, Inc. (AECI) – New Madrid Power Plant shall emit less than forty (40) tons nitrogen oxides (NO<sub>x</sub>) from the eight (8) Caterpillar 300 horsepower (hp) diesel fired internal combustion engines (EP-09) in any consecutive twelve (12) month period.

[Construction Permit No. 122002-013, Special Condition 1A]

**Monitoring/Recordkeeping:**

AECI – New Madrid Power Plant shall maintain the monthly and the sum of the most recent consecutive twelve (12) month records of NO<sub>x</sub> emissions from the eight (8) engines. Attachment H or equivalent forms approved by the Air Pollution Control Program (APCP) shall be used for recordkeeping.

AECI – New Madrid Power Plant shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Construction Permit No. 122002-013, Special Condition 1B]

**Reporting:**

AECI – New Madrid Power Plant shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition No. 1(B) indicate that the source exceeds the limitations in Special Condition No. 1(A). [Construction Permit No. 122002-013, Special Condition 1C]

**Permit Condition EU0270-001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit No. 052006-001

**Emission Limitation:**

Associated Electric Cooperative, Inc. (AECI) – New Madrid Power Plant shall emit less than forty (40) tons nitrogen oxides (NO<sub>x</sub>) from the two (2) Caterpillar 345 horsepower (hp) diesel fired internal combustion engines (EP-13) in any consecutive twelve (12) month period.  
[Construction Permit No. 052006-001, Special Condition 1A]

**Monitoring/Recordkeeping:**

AECI – New Madrid Power Plant shall maintain the monthly and the sum of the most recent consecutive twelve (12) month records of NO<sub>x</sub> emissions from the two (2) engines. Attachment I or equivalent forms approved by the Air Pollution Control Program shall be used for recordkeeping. AECI – New Madrid Power Plant shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request. [Construction Permit No. 052006-001, Special Condition 1B]

**Reporting:**

AECI – New Madrid Power Plant shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition No. 1(B) indicate that the source exceeds the limitations in Special Condition No. 1(A). [Construction Permit No. 052006-001, Special Condition 1C]

<b>EU0280 – Fly Ash/Bottom Ash Handling System</b> (Consisting of haul roads and fly ash/bottom ash truck load-in/out)		
Emission Unit	Description	2008 EIQ Reference #
EU0280	Paved Haul Road to Landfill (fly ash only)	FE-04
	Unpaved Haul Road to Landfill (fly ash and bottom ash)	FE-05
	Landfill Pile Maintenance	FE-06
	Landfill Wind Erosion	FE-07
	Truck Load-in of Fly Ash	EP-11
	Truck Load-out of Fly Ash	EP-12
	Truck Load-in of Bottom Ash	EP-14
	Truck Load-out of Bottom Ash	EP-15

**Permit Condition EU0280-001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit No. 082006-011

**Emission Limitation:**

New Madrid Power Plant shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from the modified fly ash/bottom ash handling system. [Construction Permit No. 082006-011, Special Condition 1A]

**Operational Limitation:**

- 1) New Madrid Power Plant shall control emissions from fly ash loading (EP-11) by the application of water spray. [Construction Permit No. 082006-011, Special Condition 2A]
- 2) New Madrid Power Plant shall not unload to landfill any fly ash which has not been treated using the paddle mixer to add water to the ash. [Construction Permit No. 082006-011, Special Condition 2B]
- 3) Haul Road Watering: New Madrid Power Plant shall water the unpaved landfill haul road (FE-05) whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary. [Construction Permit No. 082006-011, Special Condition 3]
- 4) Paved Haul Roads: Maintenance and/or repair of the paved landfill haul road surface (FE-04) shall be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these roads. [Construction Permit No. 082006-011, Special Condition 4]

**Monitoring/Recordkeeping:**

New Madrid Power Plant shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from the modified fly ash/bottom ash handling system. Attachment J or an equivalent form shall be used for this purpose. New Madrid Power Plant shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Construction Permit No. 082006-011, Special Condition 1B]

**Reporting:**

AECI – New Madrid Power Plant shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition No. 1B indicate that the source exceeds the limitations in Special Condition No. 1A. [Construction Permit No. 082006-011, Special Condition 1C]

EU0290 and EU0300 – Tioga Heaters		
Emission Unit	Description	2008 EIQ Reference #
EU0290	Unit 1- 2.4 MMBtu/hr No. 2 fuel fired Tioga heater, Iron Fireman Installed: 1994	IA
EU0300	Unit 2 - 2.4 MMBtu/hr No. 2 fuel fired Tioga heater, Iron Fireman Installed: 1994	

**Permit Condition EU0290-001 and EU0300-001**

10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter From Fuel Burning  
Equipment Used for Indirect Heating

**Emission Limitation:**

The permittee shall not emit particulate matter in excess of 0.10 pounds per million British thermal units (Btus) of heat input.

**Operational Limitation/Equipment Specifications:**

This emission unit shall be limited to burning fuel oil #2.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule (see Attachment K).
- 2) The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

**Permit Condition EU0290-002 and EU0300-002**

**10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds**

**Emission Limitation:**

- 1) The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from Unit 1 and Unit 2 in excess of ten (10) pounds of sulfur dioxide per million Btu actual heat input averaged on any consecutive three (3) hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]<sup>2</sup>

**Operation Limitation:**

When burning fuel oil, the units shall be limited to fuel oils with a sulfur content of no more than 0.5 percent by weight sulfur. The fuel oils known to be less than 0.5 percent by weight sulfur per Chapter 414 RSMo, Section 414.032, ASTM D396 – Table 1 and ASTM D975 - Table 1, are fuel oil #1 and #2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, the unit is not limited to the known fuel oils listed, above, but limited to fuel oils based solely on having percent sulfur by weight content of 0.5 percent or less.

**Monitoring/Recordkeeping:**

The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

**Permit Condition EU0290-003 and EU0300-003**

**10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants**

<sup>2</sup> 10 CSR 10-6.260(3)(B) is state-only requirement.

**Emission Limitation:**

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20 percent.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60 percent.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition (see Attachment C).
- 4) Attachments B and C contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

## IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

### 10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
    - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
    - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
    - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
  - b) Yard waste, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
    - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
    - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the Department Director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) New Madrid Power Plant may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if New Madrid Power Plant fails to comply with the provisions or any condition of the open burning permit.
  - a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

#### **10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;



- i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
  - 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
  - 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
  - 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

#### **10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos**

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

#### **10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the Director.
- 6) The permittee shall complete required reports on state supplied EIQ forms or in a form satisfactory to the Director and the reports shall be submitted to the Director by June 1 after the end of each reporting period.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

#### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

#### **10 CSR 10-6.170**

##### **Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

##### **Emission Limitation:**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

**Monitoring:**

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
  - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
  - b) If a violation is noted, monitoring reverts to weekly.
- c) Should no violation of this regulation be observed during this period then-
  - i) The permittee may observe once per month.
  - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

**Recordkeeping:**

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

**10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

### **10 CSR 10-3.090 Restriction of Emission of Odors**

#### **This requirement is not federally enforceable.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

### **10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

### **Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).

- e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
- f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

### **10 CSR 10-6.065(6)(C)1.B Permit Duration**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### **10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)**

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

#### **10 CSR 10-6.065(6)(C)1.E Title IV Allowances**

- 1) This permit prohibits emissions which exceed any allowances the installation holds under Title IV of the Clean Air Act.
- 2) No permit revisions shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.
- 3) Limits cannot be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.
- 4) Any allowances held by a Title IV installation shall be accounted for according to procedures established in rules promulgated under Title IV of the Clean Air Act.
- 5) The permittee applied for an Acid Rain permit on May 20, 2010. The Acid Rain Permit has been incorporated into this Part 70 Operating Permit (see Attachment F). The Acid Rain Permit is effective as long as this Part 70 Operating Permit is effective. The permittee shall submit a renewal application for Acid Rain at the same time as they submit a renewal application for this Part 70 Operating Permit (6 months prior to the expiration date)..

#### **10 CSR 10-6.065(6)(C)1.F Severability Clause**

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

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**10 CSR 10-6.065(6)(C)1.G General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

**10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

**10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios**

- 1) Currently, coal deliveries from unit trains are conveyed to a coal pile by a conveyor system. This conveyor system, manufactured by Webb and Roberts & Shaefer, reflects both pre-coal conversion processes and post-coal conversion processes (EU0050, EU0100 through EU0170 and EU0190 through EU0230) dated 1970's and 1990's, respectively, and listed as EP-05 in the application, is capable of unloading coal at approximately 4000 tons per hour. A conveyor operating from the barge unloader [EU0060 through EU0090 and EU0180, Conveyors #1 through #5 - Alternate Operating Scenario ID #AOS-01), manufactured by Webb and Roberts & Schaefer in the 1970's and 1980's, which is capable of unloading coal at 3600 tons per hour will be maintained as an alternate operating scenario to convey coal deliveries from the Mississippi River barges to the coal pile.
- 2) Currently, fly ash is loaded into trucks from the ash silo (EU0250) and is mixed with a water sluice and unloaded to an ash pond. The sluice unloading system is listed as FE-03 in the application. Under emergency conditions, the wet slurry will bypass the ash silo loading system and be sent to the ash pond directly (Alternate Operating Scenario ID #AOS-02). This scenario will be maintained as an alternate operating scenario to deliver the wet slurry to the ash pond.
- 3) Currently, coal deliveries are by unit trains dumped from a rotary car unloading system (EU0040) manufactured by Heyl & Patterson in 1993, and listed as EP-04 in the application, is capable of unloading coal at approximately 4000 tons per hour. A barge unloader (EU0050 - Alternate Operating Scenario ID #AOS-03) manufactured by Dravo in 1970, which is capable of unloading coal at 3600 tons per hour, will be maintained as an alternate operating scenario to unload coal deliveries from Mississippi River barges.



This permit shall authorize the permit holder to change among the alternative operating scenarios authorized in this permit without having to provide notice to the permitting authority; however, the permit holder shall promptly record in a log, at the permitted installation, the scenario under which it is operating. The permit shield shall apply to these terms and conditions.

**10 CSR 10-6.065(6)(C)1.J Emissions Trading**

- 1) The permittee was issued an Acid Rain permit in conjunction with the operating permit which is effective for the same time period as the operating permit. The permittee shall submit an application to renew this Acid Rain Permit at the same time that the operating permit renewal is due (6 months prior to the expiration date).
- 2) The permittee is being issued the CAIR permit in conjunction with the operating permit which is effective for the same time period as the operating permit. The permittee shall submit a renewal application for CAIR at the same time as they submit a renewal application for this Part 70 Operating Permit (6 months prior to the expiration date).

**10 CSR 10-6.065(6)(C)3 Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 1121 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:

- a) The identification of each term or condition of the permit that is the basis of the certification;
- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

#### **10 CSR 10-6.065(6)(C)6 Permit Shield**

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
  - a) The application requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
  - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

#### **10 CSR 10-6.065(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

### **10 CSR 10-6.065(6)(C)8 Operational Flexibility**

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 1121 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 1121 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

### **10 CSR 10-6.065(6)(C)9 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 1121 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report.

This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- d) The permit shield shall not apply to these changes.

#### **10 CSR 10-6.020(2)(R)12 Responsible Official**

The application utilized in the preparation of this permit was signed by William D. Evans, Plant Manager. On May 19, 2010, the Air Pollution Control Program was notified by Mr. Duane D. Highley, Director, Power Production of AECI, that the persons having the following titles are authorized to act in the capacity of a Responsible Official for the New Madrid Power Plant:

- Plant Manager
- Assistant Plant Manager
- Title IV Designated Representative
- Title IV Alternate Designated Representative

This delegation of authority includes without limitation the authority of the responsible official to represent and bind the installation in environmental permitting affairs. The permittee shall assure that the delegation of authority remains current for the duration of this permit.

#### **10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
- c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

**VI. Attachments**

Attachments follow.

## Attachment A

### Fugitive Emission Observations

[illegible]

[illegible]

**Attachment C**  
Method 9 Opacity Emissions Observations

**10 CSR 10-6.220 Compliance Demonstration**

Method 9 Opacity Emissions Observations								
Company						Observer		
Location						Observer Certification Date		
Date						Emission Unit		
Time						Control Device		
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time		Opacity					
	Start	End	Sum	Average				

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation? \_\_\_\_\_  
 YES NO Signature of Observer \_\_\_\_\_



**Attachment D**  
**Opacity Summary Report**

**PART I. INSTALLATION INFORMATION**

Name of Company: New Madrid Power Plant  
Address: St. Jude Road  
Marston, MO 63866  
Manufacturer/Model Number \_\_\_\_\_ Stack/Process \_\_\_\_\_  
CDs CNTY & SOURCE #'s: \_\_\_\_\_  
Report Period: \_\_\_\_\_  
Cer./CEA: \_\_\_\_\_ (date) \_\_\_\_\_ (Hr)  
Emission Limit: \_\_\_\_\_  
Emission Point:  
Pollutant Monitored:

Total Source Operating Time in Report Period: \_\_\_\_\_ (Min)

**PART II. CAUSE OF EXCESS EMISSIONS (EE)**

Duration of EE  
(Min \_\_\_\_\_)

Percent of  
Operating Time

A. Air Pollution Control Equipment Failure (01)

B. Fuel Problem (02)

C. Process Problem (03)

D. Unknown Cause (Excess Emission) (04)

E. Startup (05)

F. Soot Blowing (06)

G. Other Known Causes (Excess Emission) (07)

H. Shutdown (08)

I. Total (A + B + ...E)

**Part III CAUSES OF CEMS DOWNTIME**

Downtime  
(Min \_\_\_\_\_)

Percent of  
Operating Time

A. Monitor Equipment Malfunction (01)

B. Non-monitor Equipment Malfunction (02)

C. Quality Assurance (03)

D. Other Known Cause (Monitor Malfunction) (04)

E. Unknown Cause (Monitor Malfunction) (05)

F. Total (A + B + ...E)

Note: Percent Operating Time = [{EE (min \_\_\_\_\_) or Downtime (min \_\_\_\_\_)} / Total Operating Time] x 100

**Attachment D, Continued**  
**EXCESS OPACITY EMISSION SUMMARY**

Source: New Madrid Power Plant-AECI

Quarter:\_\_\_\_\_ Year:\_\_\_\_\_

Source of Emissions: \_\_\_\_\_

The following information is reported in total time for the entire quarter identified above.

Excess Emission Duration: \_\_\_\_\_ (hours)

If duration is other than zero (0), submit Visible Emission form.

Monitoring System Downtime Due to Quality Assurance: \_\_\_\_\_ (hours)

If downtime, not including zero (0) and span calibrations, is other than zero (0), submit downtime system Downtime form.

Monitoring System Downtime Excluding Downtime Due to Quality Assurance

\_\_\_\_\_ (hours)

Source Operating Time

\_\_\_\_\_ (hours)

Reported by \_\_\_\_\_

Position Title \_\_\_\_\_

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**Attachment D, Continued**

EXCESS EMISSION SUMMARY – VISIBLE EMISSIONS

Source: New Madrid Power Plant      Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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**Attachment D, Continued**

EXCESS EMISSION SUMMARY – OPACITY MONITORING SYSTEM DOWNTIME

Source: New Madrid Power Plant      Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Duration ( D-H-M)</u>	<u>Reason Message</u>
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**Attachment E**  
**SO<sub>2</sub> Emission Summary Report**

**PART I. INSTALLATION INFORMATION**

Name of Company: New Madrid Power Plant  
Address: St. Jude Road  
Marston, MO 63866

Report Period:  
Cer./CEA: (date) (Hr)  
Emission Limit:

Manufacturer/Model Number Stack/Process Emission Point:  
Pollutant Monitored: SO<sub>2</sub> #RAVG

CDs CNTY & SOURCE #'s:

Total Source Operating Time in Report Period:\_\_\_\_\_ (hrs)

PART II. CAUSE OF EXCESS EMISSIONS (EE)	Duration of EE (Hrs )	Percent of Operating Time
A. Air Pollution Control Equipment Failure (01)		
B. Fuel Problem (02)		
C. Process Problem (03)		
D. Unknown Cause (Excess Emission) (04)		
E. Startup (05)		
F. Soot Blowing (06)		
G. Other Known Causes (Excess Emission) (07)		
H. Shutdown (08)		
I. Total (A + B + ...E)		
Part III CAUSES OF CEMS DOWNTIME	Downtime (Hrs )	Percent of Operating Time
A. Monitor Equipment Malfunction (01)		
B. Non-monitor Equipment Malfunction (02)		
C. Quality Assurance (03)		
D. Other known Cause (Monitor Malfunction) (04)		
E. Unknown Cause (Monitor Malfunction) (05)		
F. Total (A + B + ...E)		

Note: Percent Operating Time = [{EE (hrs ) or Downtime (hrs )} / Total Operating Time] x 100

**Attachment E, Continued**  
**EXCESS SO<sub>2</sub> #RAVG EMISSION REPORT**

Source: New Madrid Power Plant

Quarter: \_\_\_\_\_ Year: \_\_\_\_\_

Source of Emissions: \_\_\_\_\_

The following information is reported in total time for the entire quarter identified above.

Excess Emission Duration \_\_\_\_\_ (hours)

If duration is other than zero (0), submit SO<sub>2</sub> #RAVG emission form.

Monitoring System Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

If downtime, not including zero (0) and span calibrations, is other than zero (0), submit downtime system Downtime form.

Monitoring System Downtime Excluding Downtime Due to Quality Assurance

\_\_\_\_\_ (hours)

Source Operating Time \_\_\_\_\_ (hours)

Reported by \_\_\_\_\_

Position Title \_\_\_\_\_

---

**Attachment E, Continued**

EXCESS EMISSION SUMMARY – SO<sub>2</sub> #RAVG

Source: New Madrid Power Plant      Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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**Attachment E, Continued**

EXCESS EMISSION SUMMARY – SO<sub>2</sub> #RAVG MONITORING SYSTEM DOWNTIME

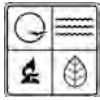
Source: New Madrid Power Plant      Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Duration ( hr)</u>	<u>Reason Message</u>
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**Attachment F**  
**Acid Rain Permit**



**Missouri Department of Natural Resources**  
**Air Pollution Control Program**

## **TITLE IV: ACID RAIN PERMIT**

In accordance with Titles IV and V of the Clean Air Act and Missouri State Rule 10 CSR 10-6.270, *Acid Rain Source Permits Required*, the State of Missouri issues this Acid Rain Permit.

**Installation Name:** New Madrid Power Plant, **ORIS Code:** 2167  
**Unit IDs:** 1 and 2

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources (MDNR), Air Pollution Control Program (APCP), Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the United States Environmental Protection Agency. Pursuant to 40 CFR 72.84, *Automatic permit amendment*, this does not necessitate a revision to any unit SO<sub>2</sub> allowance allocations identified in this permit.

Pursuant to 40 CFR Part 76, the Missouri Department of Natural Resources Air Pollution Control Program approves the Phase II NO<sub>x</sub> Compliance Plan submitted for these units, effective for the life of this permit. In addition to complying with these NO<sub>x</sub> limits, these units shall comply with all other applicable requirements of 40 CFR Part 76, including the requirement to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

This Acid Rain permit is being issued in conjunction with this operating permit and is effective for the same period of time as the operating permit. The permittee shall submit an application to renew this Acid Rain permit in conjunction with the operating permit renewal application.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Director or Designee,  
Department of Natural Resources

[illegible]

Acid Rain - Page 2

New Madrid Power Plant  
Plant Name (from Step 1)

**STEP 3**

**Read the  
standard  
requirements**

**Permit Requirements**

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

**Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

**Sulfur Dioxide Requirements**

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

New Madrid Power Plant Plant Name (from Step 1)
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Acid Rain - Page 3

STEP 3,  
Cont'd.

**Nitrogen Oxides Requirements** The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Acid Rain - Page 4

New Madrid Power Plant
Plant Name (from Step 1)

Step 3,  
Cont'd.

**Liability, Cont'd.**

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:


- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**STEP 4**

**Certification**

Read the  
certification  
statement,  
sign, and  
date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Todd A. Tolbert - Alternate Designated Representative	
Signature		Date May 14, 2010



United States  
Environmental Protection Agency  
Acid Rain Program

OMB No. 2060-0258

## Phase II NO<sub>x</sub> Compliance Plan

Page 1 of 2

For more information, see instructions and refer to 40 CFR 76.9

This submission is: ☐ New ☒ Renewal

**STEP 1**  
Indicate plant name,  
State, and ORIS code  
from NADB, if applicable

Plant Name	New Madrid Power Plant	MO State	02167 ORIS Code
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**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	Type	ID#	Type	ID#	Type	ID#	Type	ID#	Type	ID#	Type
1	CY	2	CY								

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plant Name (from Step 1)	New Madrid Power Plant
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NO<sub>x</sub> Compliance - Page 2

Page 2 of 2

STEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(ii)(B), or (b)(2)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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(n) AEL (Include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(p) Repowering extension plan approved or under review

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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STEP 3  
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units


Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(ii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Todd A. Tolbert (ADR)	
Signature		Date
		May 14, 2010



United States  
Environmental Protection Agency  
Acid Rain Program

OMB No. 2060-0258

## Phase II NO<sub>x</sub> Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: ☐ New ☒ Renewal

Page 1 of 2

### STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
New Madrid	MO	1	0.86	0.93	45,000,000
New Madrid	MO	2	0.86	0.93	45,000,000
Thomas Hill	MO	MB1	0.86	0.93	17,000,000
Thomas Hill	MO	MB2	0.86	0.93	25,000,000
Thomas Hill	MO	MB3	0.50	0.30	50,000,000

### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.76

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.76

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i}$$

$$\frac{\sum_{i=1}^n [R_{Li} \times HI_i]}{\sum_{i=1}^n HI_i}$$

Where,

- $R_{Li}$  = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;  
 $R_{Li}$  = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;  
 $HI_i$  = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;  
 $n$  = Number of units in the averaging plan



Plant Name (from Step 1)	New Madrid Power Plant
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NO<sub>x</sub> Compliance - Page 2  
Page 2 of 2

STEP 2, cont'd.

	ID#	ID#	ID#	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 76.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(n) AEL (Include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(p) Repowering extension plan approved or under review	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STEP 3  
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

**General.** This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

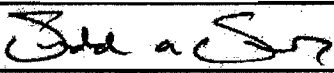
**Nitrogen Oxides.** A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(ii).

**Liability.** The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

**Termination.** An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Todd A. Tolbert (ADR)	
Signature		Date
		May 14, 2010

3/11/2010

## AECI PHASE II NO<sub>x</sub> AVERAGING PLAN

Plant Name	Unit	Alternate Contemporaneous NO <sub>x</sub> /MM Emission	Annual Heat Input
		Limitation	Limit <sup>1</sup>
New Madrid	1	0.93	45,000,000
New Madrid	2	0.93	45,000,000
Thomas Hill	MB1	0.93	17,000,000
Thomas Hill	MB2	0.93	25,000,000
Thomas Hill	MB3	0.30	50,000,000
			182,000,000

Title IV Allowable  
Btu-weighted annual  
Avg. Emission Rate: 0.76

Proposed Averaging Plan  
Projected Rate\*: 0.76

Title IV, 40 CFR Part 76 Emission Limits  
0.86 Cyclones  
0.50 Dry-bottom wall-fired

<sup>1</sup>Yearly heat input totals will vary from year to year based on load demand, and scheduled maintenance activities.

**Attachment G**  
**CAIR Permit**

# **TITLE V: CLEAN AIR INTERSTATE RULE (CAIR) PERMIT**

In accordance with Title V of the Clean Air Act and Missouri State Rules 10 CSR 10-6.362, *Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program*, 10 CSR 10-6.364 *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*, and 10 CSR 10-6.366, *Clean Air Interstate Rule SO<sub>x</sub> Trading Program*, the State of Missouri issues this CAIR Permit.

**Installation Name:** Associated Electric Cooperative, Inc. New Madrid Power Plant  
**ORIS Code:** 02167  
**Project Number:** 2007-07-089  
**Unit IDs:** Units 1 and 2  
**Effective Dates:** November 2, 2010 through November 1, 2015

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources' Air Pollution Control Program, Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

This CAIR Permit applies only to Units 1 and 2 at New Madrid Power Plant, plant 143-0004.

This CAIR permit is effective for the five-year period shown above. The designated representative must submit an application for renewal of this permit in conjunction with the operating permit renewal application.

---

Date

---

Director or Designee,  
Department of Natural Resources

## CAIR Permit Application

Page 1

(for sources covered under a CAIR SIP)

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

RECEIVED  
2007 JUL -5 PM 1:31  
AIR POLLUTION  
CONTROL PGM

### STEP 1

Identify the source  
by plant name,  
State, and ORIS or  
facility code

This submission is: ☒ New ☐ Revised

New Madrid Power Plant  
Plant Name

MO  
State

002167  
ORIS/Facility Code

### STEP 2

Enter the unit ID#  
for each CAIR unit  
and indicate to  
which CAIR  
programs each unit  
is subject (by  
placing an "X" in  
the column)

Unit ID#	NO <sub>x</sub> Annual	SO <sub>2</sub>	NO <sub>x</sub> Ozone Season
1	X	X	X
2	X	X	X

### STEP 3

Read the standard  
requirements and  
the certification,  
enter the name of  
the CAIR  
designated  
representative, and  
sign and date

#### Standard Requirements

##### (a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and such CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable).

STEP 3,  
continued

New Madrid Power Plant  
Plant Name (from Step 1)

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(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) with the CAIR NO<sub>x</sub> emissions limitation, CAIR SO<sub>2</sub> emissions limitation, and CAIR NO<sub>x</sub> Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.

(4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO<sub>x</sub> unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO<sub>2</sub> unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season

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**STEP 3,  
continued**

Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

**(d) Excess emissions requirements.**

If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO<sub>x</sub> Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

**(e) Recordkeeping and Reporting Requirements.**

(1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

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STEP 3,  
continued

**(f) Liability.**

(1) Each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

**(g) Effect on Other Authorities.**

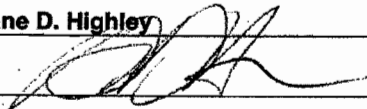
No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name **Duane D. Highley**

Signature



Date

June 27, 2007

NOTE: A 12-Month total NO<sub>x</sub> emissions less than 40.0 tons for Column 4 indicates compliance



NOTE: A 12-Month total NO<sub>x</sub> emissions less than 40.0 tons for Column 4 indicates compliance

- (a) Amount of fly ash or bottom ash processed = tons of fly ash processed through paddle-mixer or bottom ash taken to landfill on date (tons).
- (b) [Column F] = {[Column B] x [Column C]} + {[Column D] x [Column E]} x 0.0005;
- (c) Summation of [Column F] in Tons;  
Calculate the new 12-month PM<sub>10</sub> emissions total. **A 12-Month PM<sub>10</sub> emissions total (e) of less than 15.0 tons indicates compliance**

**Attachment K**  
**10 CSR 10-3.060 Compliance Demonstration**

This attachment may be used to demonstrate compliance with 10 CSR 10-3.060 *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*

Emission Limit for EU0290 and EU0300 (new, i.e. installed after February 24, 1971):

The following equipment was used to obtain the total heat input (Q) for the above equation:

Equipment	Heat Input (MMBtu/hr)
Unit 1 (EU0010)	6,340
Unit 2 (EU0020)	6,340
Two Tioga Heaters (EU0290 & EU0300)	4.8
Four LPG Heaters	8.58
<b>TOTAL</b>	<b>12,693.38</b>

According to 10 CSR 10-3.060(5)(A)2, if the total equipment heat input has a capacity rating of 2,000 MMBtu or more, the PM limit for new indirect heating sources is 0.10 pounds for each MMBtu/hr input. The various natural gas process burners at the installation are considered direct heating sources, and therefore were not included in the calculation of total heat input.

The following table demonstrates compliance with the emission limit:

$$\text{Emission Rate (lb/MMBtu)} = \left[ \frac{\text{MHDR} \times \text{Emission Factor}}{\text{Heat Capacity}} \right]$$

Emission Unit #	Heat Capacity	Fuel Type	Maximum Hourly Design Rate <sup>3</sup>	PM Emission Factor	Emission Factor Reference	Potential Emission Rate	Emission Rate Limit
EU0290	2.4 MMBtu/hr	Fuel Oil #2	0.02 10 <sup>3</sup> gal/hr	2.00 lb/10 <sup>3</sup> gal	AP-42 Table 1.3-6	0.014 (lb/MMBtu)	0.10 (lb/MMBtu)
EU0300	2.4 MMBtu/hr	Fuel Oil #2	0.02 10 <sup>3</sup> gal/hr	2.00 lb/10 <sup>3</sup> gal	AP-42 Table 1.3-6	0.014 (lb/MMBtu)	0.10 (lb/MMBtu)

<sup>3</sup> Heat capacity divided by heating value of fuel: 140 MMBtu/1000gal for fuel oil (AP-42, Appendix A)

**Attachment L**  
Excess Emissions Notification Form  
10 CSR 10-6.050 — *FAX: 573-751-2706*  
Excess Emissions due to

**Installation:**

- Installation Name:
- Installation Address:

**Date and Time:**

- Report Date, Time:
- Event Date, Time:
- Event Discovery Date, Time:
- Event Duration:

**Contacts:**

- Responsible Person, Phone:
- Submitted By:
- First Discovered By:

**Event Description:**

- Identity of the equipment causing the excess emission:
- Pollutant(s) involved:

Pollutant	Magnitude	Reference (CEMS, Calculations, etc.)

- Measure taken to mitigate the extent and duration of the excess Emissions
- Measure taken to remedy the situation which caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations:

## STATEMENT OF BASIS

### Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Renewal Application dated July 26, 2005, received July 29, 2005; revised July 19, 2006, May 7, 2008, and December 5, 2008;
- 2) 2008 Emissions Inventory Questionnaire, received June 20, 2009; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None.

### Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.350 *Emission Limitations and Emissions Trading of Oxides of Nitrogen* is not applicable to this installation. The installation is exempted under 10 CSR 10-6.350(1)(F) because the installation is subject to and implementing the requirements of 10 CSR 10-6.364 *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*.

10 CSR 10-6.360 *Control of NO<sub>x</sub> Emissions From Electric Generating Units and Non-Electric Generating Boilers* is not applicable to this installation. The installation is exempted under 10 CSR 10-6.360(1)(h) because the installation is subject to and implementing the requirements of 10 CSR 10-6.364 *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*.

### Construction Permit Revisions

The following revisions were made to construction permits for this installation:

Construction Permit 122010-012 was issued on December 17, 2010. According to Special Condition 1 of this construction permit, the conditions of permit 122010-012 supersede Special Conditions 1.A, 1.B and 1.C found in the previously issued construction permit number 122009-001. Special Condition F of Permit 122009-001 states that these special conditions may be removed upon completion of “2) Issuance of a Prevention of Significant Deterioration (PSD) permit,” which applies to permit 122010-012.

### New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Regulations*

- 1) 40 CFR Part 60, Subpart D, *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971*;  
40 CFR Part 60, Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978*;  
40 CFR Part 60, Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*; and  
40 CFR Part 60 Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*  
Associated committed to construct and had purchased the major pieces of equipment for two (2) units at the New Madrid Power Plant prior to 1971. It is this date in which Associated enter a binding contract to procure this equipment that determines what applicable standards the New Madrid Power Plant is subject to. The Main Unit Boiler #1 and #2 were committed to be built and purchased in 1967, and 1970, respectively which is prior to the earliest compliance date listed within these rules of August 17, 1971. Therefore no NSPS applies to these two (2) units.
- 2) 40 CFR Part 60, Subpart Y, *Standards of Performance for Coal Preparation Plants*  
The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than two hundred (200) tons per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems that commence construction or modification after October 24, 1974.
  - a) The installation did install coal handling equipment after the applicability date. Subpart Y will apply to the coal handling equipment (only conveyors and crushing/conditioning systems) that were constructed after the applicability date of NSPS Subpart Y.
  - b) All other remaining coal handling equipment (Conveyors #1, #2, #3, #4, #A1, #A2, #B1, #B2, #C1, #C2, #D1, #D2 and the ladder type barge unloader) are considered to be constructed prior to the NSPS applicability date and would be considered existing (installed prior it April 13, 1971) under the state regulation. The forty percent (40%) opacity limitations will apply to them, exempting them from provisions of the NSPS, Subpart Y.
- 3) 40 CFR Part 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*
  - a) The Emergency Diesel Generator was installed in 1983 which is prior to the compliance date of July 11, 2005 and so is not subject to 40 CFR Part 60, Subpart IIII.
  - b) According to 40 CFR §60.4200, the provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition internal combustion engines. The ten diesel barge river pumps engines (EU0260 and EU0270) are not are not stationary sources, because they do not remain in a single location on a permanent basis. Therefore, the diesel engines are not subject to the requirements of 40 CFR Part 60, Subpart IIII.
- 4) 40 CFR Part 60, Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification commenced After June 11, 1973*  
40 CFR Part 60, Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification commenced After May 18, 1978, and Prior to July 23, 1984*

40 CFR Part 60, Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.*

The following storage tanks are below the level of reporting significance (Subpart K & Ka – 40,000 gallons and Subpart Kb – 19,812.9 gallons or the material being stored (#2 Fuel Oil) does not meet the definition of petroleum liquids according to 40 CFR Part 60, Subpart Ka and therefore are not subject to 40 CFR Part 60 Subpart Ka or Kb):

Description	Capacity
Two #2 Fuel Oil Tanks	500 gallons each
Diesel Fuel Oil Tank	340 gallons
Unleaded Gasoline Tank	3,000 gallons
Used Oil Tank	1,750 gallons
Used Oil Tank	3,000 gallons
Four Glycol Tanks	17,800 gallons each
Glycol Tank	1,000 gallon
Transmission Fluid Tank	360 gallons
Mobile Oil Tank	400 gallons
Two Lubricating Oil Storage Tanks	1,035 gallons each
Bulk Oil Tank	660 gallons
Yard Diesel Tank	8,500 gallons
Two Hydrazine Tanks	55 gallons each
Sulfuric Acid Tank	9,500 gallons
Four Propane Storage Tanks	500 gallons each
Four Propane Storage Tanks	1,000 gallons each
Three Soot Blowing Air Compressor Oil Tanks	1,000 gallons each

The following storage tanks are not subject to the requirements of Subpart Kb. This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) (0.5 psia) or with a capacity greater than or equal to 75 m<sup>3</sup> (19,812.9 gallons) but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psia). The true vapor pressure of the materials being stored are less than 15.0 kPa. [§60.110b(b)]

Description	Capacity (m <sup>3</sup> )	Solvent Vapor Pressure (kPa)
Two #2 Fuel Oil Tanks	94.64 each	0.06

### Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

- 1) The installation operates emergency diesel generator (EU0030) whose operations are limited to emergency situations and ten (10) diesel pumps (EU0260 & EU0270) with ratings less than 500 brake horsepower. According to 40 CFR 63.6590 (*What Parts of My Plant Does This Subpart Cover?*), an existing compression ignition emergency stationary RICE with a site-rating more than 500 brake horsepower located at a major source of HAP emissions, does not have to meet the

requirements of this subpart and of subpart A of this part and no initial notification is necessary. Therefore, the regulation is not applicable to EU0030 since it is an existing emergency CI RICE rated at greater than 500 horsepower at a major source.

*Emergency stationary RICE* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in §63.6640(f). [§63.6675]

- 2) EU0260 (Eight 300 HP) and EU0270 (Two 345 HP) Diesel Barge River Pumps  
These ten diesel barge river pumps less than 500 HP are used to pump cooling water during periods of low river flow. According to AECl, these engines sit in storage for months, even years before they are put in service to pump cooling water from the river. When in service, they are located at the cooling water inlet - they sit on a sort of skid mounted boat hull. Once the river water comes back up, the plant moves them back to storage until the river water drops off again. They may be in storage for months or years depending on river levels - and AECl only use them when it is absolutely necessary.

According to 40 CFR §1068.30, the ten diesel barge river pump engines qualify as non-road / non-stationary RICE, and so are not subject to 40 CFR Part 63, Subpart ZZZZ.

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*

40 CFR Part 61 Subpart M – *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

### **Compliance Assurance Monitoring (CAM) Applicability**

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.



The two coal fired boilers (EU0010 and EU0020) are affected units for particulate matter (PM) emissions under the CAM rule. CAM plans for the above listed sources are incorporated in the operating permit (See Permit condition EU0010-002 and EU0020-002).

### **Other Regulatory Determinations**

- 1) 10 CSR 10-3.060, *Restriction of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*.
  - a) This rule requires that the heat input from all indirect heating sources be included in determining the allowable particulate emission amount. The two (2) coal fired boilers (EU0010 and EU0020) are each rated at 6,340 million Btu per hour and all space heaters combined at 13.38 Btu per hour. The installation's combined heat input rate of 12,693.38 million Btu per hour was used to determine the allowable particulate emission for the indirect heating sources. This was determined to be 0.18 pounds per million Btu of heat input for the coal fired boilers according to 10 CSR 10-3.060(4)(A)2. and 0.10 pounds per million Btu of heat input for the space heaters according to 10 CSR 10-3.060(5)(A)2.
  - b) Four Liquified Petroleum Gas heaters (8.58 MMBtu/hr total heat input) listed as emission units without limitation  
Though the LPG heaters are subject to the requirements of this rule, the APCP does not consider these units to be capable of exceeding the particulate matter emission limitation (0.10 lbs/MMBtu). Conservatively assuming the heating value of LPG at 94,000 Btus per gallon and using the PM emission factor for LPG combustion of 0.4 lbs PM per 1000 gallon propane (AP-42, Section 1.5, Table 1.5-1, October 1996); the potential emission is 0.04 lbs/MMBtu.  
Therefore the gas heaters are not included in this operating permit.
- 2) A unique condition exists at New Madrid Power Plant concerning emission points (emission unit and fugitive sources), the emission points have been defined for a long-standing period of time have been identified as the conveyor belts. The actual emission points appear to be the transfer points and specifically the baghouse vents. The transfer points are totally enclosed towers. The transfer points allow for various operating schemes to be utilized by the installation. The capacity and operating schemes requires very large transfer and drop points. One scheme will allow a portion of the material to move forward while a smaller portion is transferred to a second belt scheme that will deposit the coal in a pile near the tower as an intermediate feed stock. The intermediate feed stock may be sent to another unit. The emission points (the conveyor belts) are in some places covered and in other places totally enclosed.

Those sections that are totally enclosed have bag houses and bag house venting connected to drop points and other areas of the feed system by way of the transfer towers. The portions of the emission points that are only covered are considered to be fugitive sources. The portions of the belts that are enclosed are considered to be point sources. 10 CSR 10-6.400, *Restriction of Particulate Matter from industrial Processes*, applies to non-fugitive sources (i.e. the conveyor belts) except coal conveyers that are exempt from 10 CSR 10-6.400. However, no mechanism exists that will allow for the addition of new material to the belt at the fugitive portions of the belts. Calculations have shown compliance with all of these points and no other method exists at the fugitive sections to increase the amount of material on the belt. The installation has been operating at this site for several decades. However, 10 CSR 10-6.170, which is a Core Permit Requirement, would apply to the fugitive sections of the belts.

These indicators were used in assigning the opacity to the belts. 1) Was the belt new or existing? If the belt was new then the opacity for new equipment applied. If it was existing-was the belt modified in the low sulfur coal conversion? If it was modified then it would be considered new and the new opacity would apply.

- 3) Concerning state rule, 10 CSR 10-6.260, *Restriction of Emissions of Sulfur Compounds*, in a letter dated September 02, 1998 from Patricia Pride, Environmental Engineer from the State of MO, stated "facilities having a continuous emissions sulfur dioxide monitor, do not have to submit a coal analysis report. At anytime when the monitor is inoperable, it will be necessary to submit a coal analysis report for that time to show compliance." The monitoring, recordkeeping and reporting sections of this rule are considered void when an installation has a continuous emissions sulfur dioxide monitor in service.
- 4) For Title V purposes, compliance to meet the reporting requirements, herein, is demonstrated via quarterly reports pursuant to 40 CFR Part 75, CEMS, and State reporting as required under 10 CSR 10-6.220, *Restriction of Emissions of Visible Air Contaminates*. The MDNR has unlimited access to files and documents that must be kept by the installation. Enforcement discretion applies to administrative recordkeeping compliance not only for CEMs but also for all applicable permit conditions and regulatory requirements. The annual compliance certification statement, required to be submitted by the installation, will provide a detailed explanation (or year-in-review summary) for all compliance or non-compliance activities.
- 5) In general, reporting required every six (6) months, as specified in 40 CFR 70.6 (a)(3)(iii)(A) for Title V Operating Permits is met by the installation submitting quarterly reports pursuant to a more stringent federal or State standard or permit condition. Where a more stringent requirement to report is addressed as a permit condition in the Title V permit (i.e., quarterly reporting), six (6) month reporting is not required. However, where the permit defines no periodic reporting requirement, a six (6) month report should be submitted for review by the Administrator. Additionally, only those applicable requirements, subject to a monitoring provision and not reported, elsewhere, should be required to submit a six (6) month report. Further, Associated may use quarterly reporting (as currently being done), reporting submitted on a six (6) month basis that contains information for permit conditions that are not submitted more frequently, and the annual compliance certification statement as fulfillment of the reporting provisions required by this permit. However, this in no way allows for non reporting of any violation of any regulation as stated in this permit or other state or federal regulations of Title V.
- 6) Emission Units Without Limitation:
  - a) The units listed in the "Emission Units Without Limitations" section in the front of this permit either have no applicable regulations associated with them or are considered insignificant activities.

The sources in the table below listed as units without limitation are fugitive sources that do not emit regulated pollutants from a discrete stack or vent. These sources emit particulate matter directly into the ambient air. These sources do not have any type of capture/control devices and are not covered or required to control their emissions based on any past or current regulations. These sources are not subject to any specific rule except the core permit requirement of 10 CSR

10-6.170 and the asbestos requirements for asbestos abatement activities and must comply with these requirements.

EQ Reference #	Description of Emission Unit
FE-01	Coal Pile, Bituminous and Subbituminous Coal, 23 acres
FE-02	Haul Road
FE-03	Fly Ash Unloading
	Asbestos Abatement Activities (associated with repair/replacement of plant equipment)

- b) The following is the list of equipment not subject to an applicable requirement identified as insignificant activities at the time of permit issuance. However, the installation is not limited to those activities listed, below.
- Two – 25,000 Gallon #2 Fuel Oil Tanks
  - One – 340 Gallon Diesel Fuel Oil Tank
  - One – 3,000 Gallon Unleaded Gasoline Tank
  - One – 1,750 Gallon Used Oil Tank
  - One – 3,000 Gallon Used Oil Tank
  - Four – 17,800 Gallon Glycol Tanks
  - One – 1,000 Gallon Glycol Tank
  - One – 360 Gallon Transmission Fluid Tank
  - One – 440 Gallon Mobile Oil Tank
  - Two – 1,035 Gallon Lubricating Oil Storage Tank
  - One – 660 Gallon Bulk Oil Tank
  - One – 8,500 Gallon Yard Diesel Tank
  - Two – 55 Gallon Hydrazine Tanks
  - One – 9,500 Gallon Sulfuric Acid Tank
  - Two – 790 and One – 200 Gallon Tanks Associated with Turbine Hydraulic System (EHC)
  - Two – 4,000, Two – 13,840 and Two – 9,200 Gallon Tanks Associated with the Lube Oil Tank Vents
  - Lube Oil Vapor Extractor Vent
  - Four – 1,450 and Two – 540 Gallon Tanks Associated with Boiler Feed Pump Lube Oil Vapor Vents
  - Miscellaneous Hydraulic Equipment on Unit 1 and Unit 2
  - Four – 500 Gallon Propane Storage Tanks
  - Four – 1,000 Gallon Propane Storage Tanks
  - Oil (Spills and Leaks) – from Transformers, Equipment, Etc.
  - One – 1 Ton Chlorine cylinder Used in Chlorination System
  - Nine Portable Parts Washers (Two – 36 Gallon, Six – 27 Gallon and One – 15 Gallon)
  - Glycol Heater Vents
  - Seal Oil Vacuum Pump Discharge Vent
  - Three – 1,000 Gallon Soot Blowing Air Compressor Oil Tanks and Vents
  - Acetylene Cylinders Used in Maintenance Activities
  - Portable Gasoline Powered Pumps Used for Sumps and Maintenance Equipment as Needed
  - Portable Diesel Generators Used for Equipment Power at Various Locations for Maintenance or Start-up Activities
  - Small Portable Pumps for Various Feed Water, Oil Lubricating and Maintenance Systems

**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1) The specific pollutant regulated by that rule is not emitted by the installation;
- 2) The installation is not in the source category regulated by that rule;
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4) The installation does not contain the type of emission unit which is regulated by that rule;
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

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